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IN THE CLAIMS

Please amend claims 1, 2 and 39 and cancel claims 6, 7 and 29 without any prejudice or disclaimer to the subject matter expressed therein as indicated in the complete listing of all claims in the application set forth below.

Claim 1. (Currently Amended) An isolated DNA sequence comprising a nucleic acid sequence that is SEQ ID NO: 1 or the complement and a complementary sequence thereof.

Claim 2. (Currently Amended) The isolated <u>DNA sequence nucleic</u> acid of claim 1, wherein said DNA sequence nucleic acid is cDNA.

Claims 3-29. (Canceled)

Claim 30. (Previously Presented) A method for diagnosing an individual as having an increased risk of developing HH disease, comprising:

providing the isolated DNA sequence of claim 1 from the individual; and

assessing the isolated DNA sequence for the presence or absence of a base mutation at position 734 (A734C) of the SLC11A3 gene, wherein the presence of the A base indicates the absence of a HH gene mutation in the genome of the individual and the presence

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of the C base mutation indicates the presence of the HH gene mutation and an increased risk of developing HH disease in the genome of the individual being diagnosed.

Claim 31. (Previously Presented) The method of claim 30, wherein the assessing step is performed by a process which comprises subjecting the isolated DNA sequence to amplification using oligonucleotide primers flanking the base-pair mutation.

Claim 32. (Previously Presented) The method of claim 31, wherein the assessing step further comprises an oligonucleotide ligation assay.

Claims 33-38. (Canceled)

Claim 39. (Currently Amended) A kit for diagnosing an individual as having an increased risk of developing HH disease, comprising:

an isolated DNA sequence of SEQ ID NO: 1 or the complement.

a means for providing the isolated DNA sequence of claim 1

from the individual;

a means for assessing the isolated DNA sequence for the presence or absence of a base mutation at position 734 (A734C) of

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the SLC11A3 gene, wherein the presence of the A base indicates the absence of a HH gene mutation in the genome of the individual and the presence of the C base mutation indicates the presence of the HH gene mutation and an increased risk of developing HH disease in the genome of the individual being diagnosed; and